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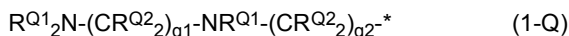
(54) **METHOD FOR DELIVERING ACTIVATORS TO CELLS**

(57) The present embodiment provides a method for delivering activators to cells, wherein said activator containing lipid particles are brought into contact with the cells, where a compound represented by the formula (1):



wherein

Q is represented by the following formula (1-Q):



wherein

each R^{Q1} is independently an alkyl,

each R^{Q2} is independently hydrogen or an alkyl,

any two of R^{Q1}s and R^{Q2}s may link together to form a nitrogen-containing alicyclic ring,

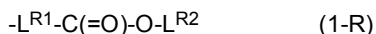
q1 is an integer of 1 to 4,

q2 is an integer of 0 to 4, and

the mark * indicates the position bonding to -CHR₂; and

each R is independently an aliphatic group of C₁₂ to C₂₄;

wherein said R is represented by the following formula (1-R):

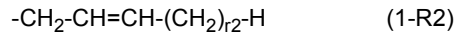


where

LR¹ is alkylene and

LR² is represented by the following formula (1-R2):

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where r2 is an integer of 1 to 10.

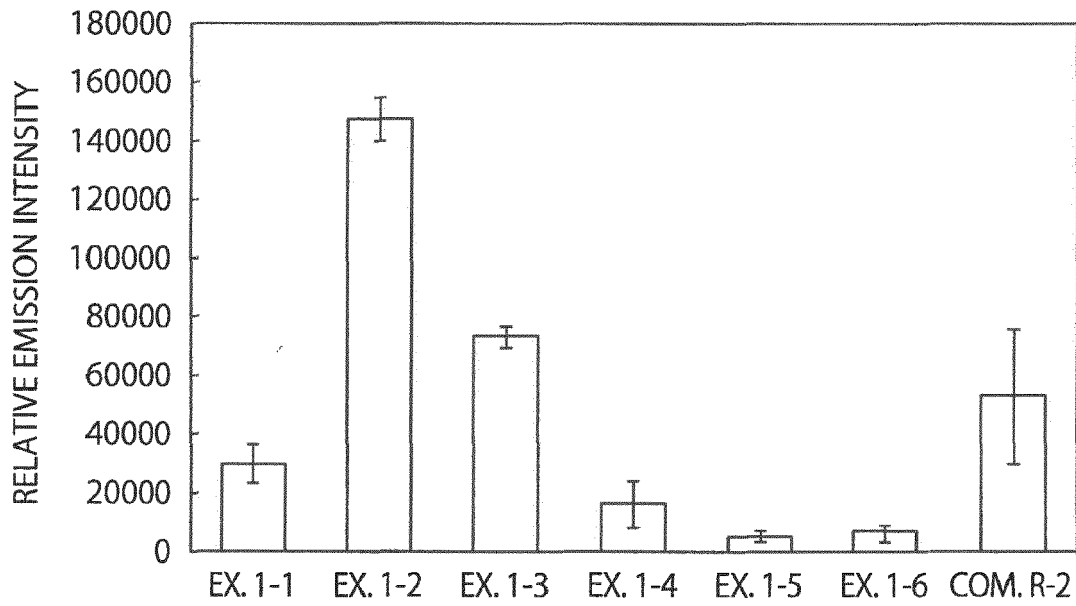


FIG. 1

(52) Cooperative Patent Classification (CPC): (Cont.)
C07D 295/13; C07D 295/15; A61K 31/7088



EUROPEAN SEARCH REPORT

Application Number

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	<p>WO 2013/086354 A1 (ALNYLAM PHARMACEUTICALS INC [US]) 13 June 2013 (2013-06-13)</p> <p>* page 1, paragraph 2 *</p> <p>* page 65; compounds in 1st, 10th and 11th row, 3rd column *</p> <p>* page 66; compounds in 2nd and 8th row, 2nd column *</p> <p>* page 70; compound in 4th row, 3rd column *</p> <p>* page 73; compounds in 3rd and 10th row, 1st column; 5th row, 2nd column; 12th row, 3rd column *</p> <p>* page 75; compound in 3rd and 10th row, 3rd column *</p> <p>* page 202 - page 210; examples 35-37; tables *</p> <p>* claims 1, 19-34 *</p> <p>* claim 19; page 229 ; compounds in 4th row wherein X is NR; pages 231 and 232; compounds wherein X is NR *</p> <p>* page 76; compounds in 7th and 13th row, 3rd column *</p> <p style="text-align: center;">-----</p>	1-17	<p>INV.</p> <p>C07D211/14</p> <p>C07D233/02</p> <p>C07D241/04</p> <p>C07D243/08</p> <p>C07D251/04</p> <p>C07D295/13</p> <p>C07D295/15</p> <p>C07C229/24</p> <p>A61K9/127</p> <p>A61K31/7088</p> <p>A61K31/7105</p> <p>A61K31/711</p> <p>A61K45/00</p> <p>A61K47/16</p> <p>A61K47/18</p> <p>A61K47/22</p> <p>A61K47/24</p>
			<p>TECHNICAL FIELDS SEARCHED (IPC)</p> <p>C07C</p> <p>C07D</p> <p>A61K</p> <p>A61P</p>
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
Munich		10 April 2024	Cortés Suárez, José
CATEGORY OF CITED DOCUMENTS		<p>T : theory or principle underlying the invention</p> <p>E : earlier patent document, but published on, or after the filing date</p> <p>D : document cited in the application</p> <p>L : document cited for other reasons</p> <p>.....</p> <p>& : member of the same patent family, corresponding document</p>	
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
			A61K47/28 A61K47/34 A61K47/42 A61K48/00 A61P43/00
			TECHNICAL FIELDS SEARCHED (IPC)
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 10 April 2024	Examiner Cortés Suárez, José
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

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5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

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